

AMENDMENTS TO THE CLAIMS

The following is a listing of claims that replaces all prior versions, and listings, of claims in the application:

Claims 1-12 (Currently Cancelled).

13. (Previously Amended) A method of attaching a protein to a surface of a layered silicate, said method comprising the steps of:
covalently attaching said protein to an arginine tag, and
contacting said arginine tag with said surface of said layered silicate,
wherein said protein is selected from the group consisting of a DNA binding protein, a molecular motor, an actin filament, a microtubule, a myosin filament, an actin binding protein, and a myosin filament binding protein.

Claims 14-55 (Previously Cancelled).

Claims 56-70 (Currently Cancelled).

71. (Previously Added) The method of Claim 13, wherein said arginine tag comprises at least two arginine residues.

72. (Previously Added) The method of Claim 13, wherein said arginine tag comprises from two to 100 arginine residues.

73. (Previously Added) The method of Claim 13, wherein said arginine tag consists of arginine residues.

74. (Previously Added) The method of Claim 13, wherein said layered silicate comprises mica.

75. (Currently Amended) The method of ~~Claim~~ Claim 13, wherein said method further comprises contacting said surface of said layered silicate with a solution comprising a sodium salt in a concentration sufficient to remove ~~molecules~~ said arginine tag that is bound to said surface of said layered silicate by non-specific ion exchange.

76. (Previously Added) The method of Claim 75, wherein said sodium salt is present in a concentration of at least 1 mM.

Claims 77-80 (Currently Cancelled).

81. (Previously Added) The method of Claim 13, wherein said layered silicate is chosen from one or more of vermiculite, ~~montmorillonite~~ montmorillonite, hentonite, hectorite, fluorohectorite, hydroxyl hectorite, muscovite boron fluorophlogopite, hydroxyl boron phlogopite, and mica.

82. (Previously Added) The method of Claim 13, wherein said arginine tag comprises a homopolymer consisting of 6 contiguous arginine residues.

Claims 83-91 (Currently Cancelled).